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AUTHOR	Campbell, John P.
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ABSTRACT

This guide discusses organizational effectiveness, and is divided into the following sections: (1) Preface; (2) Effectiveness as a Construct; (3) The Task Objective Model; (4) How to Assess Effectiveness; (5) Research to be Done; and (6) References. (Author/JLL)

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Structures for Organizational Effectiveness

Criteria and Their Implications

John P. Campbell

University of Minnesota

September, 1976

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Paper presented at a symposium (Current issues in organizational effectiveness research) at the American Psychological Association national convention, Washington, D.C., Sept., 1976.

I would like to do four things in this paper.

1) Ask you to ignore the title since I cannot reconstruct how it came to be. Unfortunately, the episode is symptomatic of the topic of organizational effectiveness.

2) Argue that to understand organizational effectiveness, to develop measures of effectiveness, and to decide whether a particular measure is good or bad, one must have a theory or model of effectiveness.

3) Briefly describe the particular model of effectiveness that I think is most useful.

4) Comment on where the model seems to lead.

PREFACE

Most of these remarks are based on a rather lengthy review of this topic that I and three of my colleagues did two years ago (Campbell, Bownas, Peterson, & Dunnette, 1974). Little has happened since to change the conclusions we reached then, including our own efforts. Organizational effectiveness is a very complex topic. It has a tendency to turn otherwise articulate and proud people into insecure mumblers. Thus, it is particularly convenient that in the interests of time I must sidestep two difficult and troublesome questions:

1) What is an organization and how is it different or superordinate to the people in it?

2) At what level of aggregation should one talk about organizational effectiveness: Individuals? Small groups, large groups, multi-leveled groups, functionally distinct departments, everybody under one roof, etc.?

EFFECTIVENESS AS A CONSTRUCT

Organizational effectiveness is a construct. It cannot be represented by a single variable or set of variables. I think I can assert without fear of contradiction that all attempts to develop a universal set of such criteria have failed, just as they failed with regard to measures of individual performance. In my opinion, the construct must have at least four ingredients:

1) It must deal with whether or not organizations have goals, and if so, what kind.

2) It must deal with the purposes or decisions for which effectiveness information is to be used.

3) It must specify the general procedure by which one moves from a general model to a concrete specification of effectiveness indicators.

4) It must identify what are empirical questions and what are questions of values.

Goals vs. No Goals

Two major points of view have competed for the prize of the most useful general conceptualization of org. effectiveness. They have been given various labels but the most popular are the goal centered view and the natural systems view (e.g. see Ghorpade, 1971).

The goal centered view assumes that the organization is in the hands of a rational set of decision makers who have a finite set of goals in mind which they wish to pursue. Within this orientation, the way to assess effectiveness would be to develop criterion measures to measure how well the goals are being achieve. There are a number of variations of the goal centered view. The management by objectives tradition (e.g. Odiorne, 1965, 1969) tends to fall in this category. The recently renewed movement toward cost/benefit analysis (Rivlin, 1971) is an ambitious attempt to assess the actual utility of accomplishing specific goals. During the 1960's, the attempt to derive overall measures of military readiness (Hayward, 1968; Popper & Miller, 1965) is yet another variation. The I/O psychology view of individual performance is certainly a goal model.

The natural systems view appears to assume that if an organization is of any size at all, it is so dynamic and so complex that it is not possible to define a finite number of goals in any way that is meaningful. Rather, the organization adopts the overall goal of maintaining its viability through time without depleting its environment or otherwise fouling its nest. Thus to assess an organization's effectiveness one should try to find out whether its resources are being wisely distributed, whether its adaptive mechanisms are in good working order, and so forth. One requirement here is a model that specifies the kinds of adaptive mechanism that must be built. It cannot prepare itself for literally everything. One clear example of such a model is the one developed by Likert and his associates (Likert, 1961, 1967). In the beginning the basic systemic variable was the degree to which subordinates participated in making the decisions which affected them. By implication, an organization in which decisions were made participatively was a healthy, capable, and adaptive organization. The list has since been expanded to include communication factors, motivational practices, and the like and the current "state" of the organization is measured via a questionnaire. Other examples of systems models can be found in the organization development (OD) domain, such as those outlined by Argyris (1964) and Blake and Mouton (1968). The OD models tend to define a healthy system in terms of open communication, free expression of feelings as well as ideas; open consideration of conflict, etc. The assumption is that an organization scoring high on these variables will be effective.

Thus, a natural systems oriented analyst would not first ask what the organization was trying to accomplish, but would be concerned with the overall viability and strength of the system as defined by some a priori notions of what the characteristics of a strong system are.

Historically, the systems view was in part a backlash against the goal model because of the frustration experienced in articulating a generalizeable set of goals for organizations. An even more radical view is that articulated by Georgiou (1973) who reminds us of the simple fact that organizations are made up of individuals and when we think of organizations as anything more than the sum of a variety of diverse parts, we get in trouble. Instead, it makes more sense to think of organizations as under the control of individual preferences. Georgiou is a political scientist, and foreign born at that, but his point of view is almost orthodox Skinnerian. To understand what organizations are trying to do, we must look at specific episodes or actions (i.e. responses) and try to discern the incentives that are controlling the behavior of the individuals involved. I am in sympathy with this point of view and it is compatible with the model of effectiveness that I wish to advocate, which I'll call the task objectives model.

The Task Objectives Model

There is a recurring theme in a number of different domains of psychological and educational research that has taken on many of the characteristics of a Kuhnian (Kuhn, 1962) paradigm. While the basic idea has never really been applied to the problems of measuring organizational effectiveness, it appears so many other places that I think it deserves consideration in the present context.

The basic message, although trite sounding, is this. If we want to judge the effectiveness of an "intervention" dealing with changing behavior, then it is necessary to specify the specific behavioral objectives of the intervention. The term behavioral objectives is used in a very atomistic sense and one would expect a list of such objectives to be quite long for an intervention of any complexity. The list constitutes the precise definition of what we want the intervention to accomplish in specific observable terms.

This theme arises in several different contexts. Probably its first major articulation came from research and development on programmed instruction techniques where the term "terminal behaviors" refers to the specific things the learner should be able to do when the PI sequence is completed.

The PI model has been expanded into a comprehensive procedure for designing and evaluating almost any instructional effort. The seminal contributions were those of Gagné (1962), Briggs (1968), and Glaser (1969). Gagné's now classic argument is that if we cannot clearly specify "what is to be learned" then it is almost axiomatic that we cannot design the training program itself or evaluate its effects. By analogy, if we cannot clearly specify what we want an organization to do then it is not possible to design its structure and functions, or assess how effective it is. The fact that courses are taught and organizations are designed and assessed anyway is not really an argument for anything. It merely means the process of objective specification has been intuitive or by default.

Although simplistic in form, Gagné's idea created something of a revolution in training and curriculum development because he argued that applications of psychological theories of learning are not the primary concern. The straightforward descriptive question of what is to be learned is far more important. By analogy, theories of formal organization will not help us too much in the assessment of organizational effectiveness. What will help is the unexciting and head-breaking task of deciding what the specific objectives of the organization are or should be.

Obviously another domain in which this theme surfaces is in individual performance measurement. Smith and Kendall (1963) used Flanagan's (1954) critical incident technique to develop a method for defining individual performance in terms of specific behaviors referred to as Behavior Expectation Scaling (BES).

Another related area is the push toward so-called "criterion referenced testing" for achievement measurement. Criterion referenced testing defines a score in terms of the actual skills or knowledges it represents (e.g. being able to identify the 17 most common auto maintenance problems). No mention is made of relative standing in a norm group. Test items are selected such that the score reflects the level of competency directly. It should be obvious that to generate such test items, the test developers must understand the subject matter very well in terms of what represents different levels of skill.

Again, I would like to point out the common theme. Competence, or performance, can only be assessed by reference to a long list of highly specific behavioral objectives. Specification of these objectives serves as a rigorous definition of what it is we want the individual performer to be able to do. By analogy, the way to assess organizational performance is for the relevant "experts" in the organization to specify a reasonably complete catalog of task objectives. These objectives should have 3 characteristics.

1) They must be <u>concrete</u>, <u>observable</u> things that organizations do.

2) The conditions under which the organization should be able to do them must be specified.

3) The degree to which each objective must be satisfied must also be nailed down.

Where then does this paradigm lead with regard to effectiveness assessment?

HOW TO ASSESS EFFECTIVENESS

As a first step, the decisions or courses of action for which the effectiveness data will serve as an input must be described explicitly. The list cannot be a cosmetic one. It must reflect the actual decisions to be made, no matter how banal, uncomfortable, or painful. For example, the military has always had a problem with Officer Fitness Reports (i.e. performance appraisals). The distribution of ratings is very negatively skewed and almost everyone looks absolutely great. However, the fitness report serves several purposes, not all of which are compatible. For promotional purposes it would be nice to distinguish clearly among individual subordinates. However, a commanding officer often uses high ratings to create high morale in his group. Also, the higher the overall ratings of his subordinates, the better he looks to his own superiors. Obviously, the same data cannot serve such conflicting demands very well. It ought not be asked to do so. No amount of psychometric slight of hand will overcome the conflict. The overall morale is the same for determining organizational effectiveness. At every stage in the process two questions must be asked. Will the data base toward which we are moving answer the questions we want it to answer? Are we inadvertently moving toward asking the same data to serve conflicting aims?

The next ingredient is the specification of the task objectives of the organization or subunits under consideration. Again, the list would be quite long, highly specific, and a lot of work to generate. Obviously, this is a rejection of the notion that organizations are too complex to know what they are trying to do. It is assumed here that it is "good" to know.

Once the list of task objectives is specified, several value judgments must be made about it. The major ones are:

A. The organization must decide which are considered means and which are considered ends. Is a particular objective a dependent variable in its own right, or is it really an independent variable that the organization hopes will "cause" certain changes in some more terminal outcome. Expressed job satisfaction is the classic example about which such a judgment must be made.

B. The conditions under which the organization should be able to accomplish a particular objective must also be spelled out to the fullest extent possible. Changes in regulatory statutes, economic conditions, the available labor supply, etc., are examples of things to be considered.

C. The relative importance of each objective should also be judged.

If the above judgments are made in a thorough and systematic manner, the real conflict in the organization will be identified. It is too much to expect for there to be complete unanimity in these matters; and if the organization internalizes this model of effectiveness, it will not have such an expectation. It is also obvious that from this point of view, strategies of conflict resolution will play an important part in the assessment of organizational effectiveness.

The overall definition of organizational effectiveness then, is the degree to which the task objectives judged to be "ends" are being accomplished. It is at this point, and not before, that the question of how to measure the degree of goal attainment becomes operative. Too frequently we have jumped immediately to the question of what questionnaire or criterion measure to use before considering these prior, and perhaps more important, questions. In the training and educational field, from whence this model came, this is analogous to seizing upon a training technique before deciding what it is we want to teach. I would submit that the measurement problems pale in comparison to the prior questions and that when they are answered, the measurement problems will be substantially resolved.

One vexing problem that arises at this point has to do with comparing organizations in terms of their effectiveness, since the model tends toward an idiosyncratic definition of effectiveness. However, from a decision making point of view, such comparisons would only be made if the organizations indeed shared tasks in common. If no set of common tasks can be identified, then there is something strange about wanting to make the comparisons.

RESEARCH TO BE DONE

Our review of the existing empirical literature on org. effectiveness yielded 2 major conclusions, among others.

1) Most of the criteria used in such studies are "measures of convenience" and thus are difficult to interpret in any generalizeable way.

2) The multivariate procedure of criterion exploration that measures a large number of organizations on a large number of possible criteria and then examines the correlation matrix for a parsimonious set of common factors is probably not a fruitful way to proceed. Obtaining a large number of observations is too costly and defining the same variable the same way across all organizations is difficult.

As a consequence, I propose that we drop back several paces and concentrate on some very fundamental empirical questions.

A. It would be advantageous to spend a certain amount of time in straightforward descriptive studies of the kinds of goal setting activity that goes on in organizations and the incentive systems that maintain it. Baseline data are important and we have very little of them.

B. We must also devote a certain amount of effort to developing techniques for task goal analysis. This is analogous to developing job description techniques for individual performance. We will have to find out the most cost effective method for obtaining comprehensive descriptions of task objectives for the relevant parties.

C. The value questions of which goals are "ends" rather than "means," which are the most important, and the conditions under which goal accomplishment is expected are human judgments that must be made. As such, the processes by which such value judgments are made are important areas for research.

In general, what I hope I am preaching for is research that involves multidimensional scaling not factor analysis, plain old description not prediction, and a concentration on processes not outcomes.

REFERENCES

Argyris, C. Integrating the individual and the organization. New York: Wiley, 1964.

Blake, R. R., & Mouton, J. S. Corporate excellence through grid orientation development. Houston: Gulf Publishing Co., 1968.

Briggs, L. J. Sequencing of instruction in relation to hierarchies of competence. Pittsburgh: American Institutes for Research, 1968.

Campbell, J. P., Bownas, D. A., Peterson, N. G., & Dunnette, M. D. "The measurement of organizational effectiveness: A review of relevant research and opinion." Final Report, 1974. Navy Personnel Research and Development Center Contract NQ0022-73-C-0023. Minneapolis: Personnel Decisions, Inc., Mpls, Minn., 1974.

Flanagan, J. C. The critical incident technique. Psychological Bulletin, 1954, 51, 327-358.

Gagné, R. M. Military training and principles of learning. American Psychologist, 1962, 17, 83-91.

Georgiou, P. The goal paradigm and notes toward a counter paradigm. Administrative Science Quarterly, 1973, 18, 291-310.

Ghorpade, J. (Ed.) Assessment of organizational effectiveness. Pacific Palisades, Calif.: Goodyear, 1971.

Glaser, R. Learning. In Review of Educational Research (4th ed.) New York: Macmillan, 1969.

Hayward, P. The measurement of combat effectiveness. Operations Research, 1968, 16, 314-323.

Likert, R. New patterns of management. New York: McGraw-Hill, 1961.

Likert, R. The human organization. New York: McGraw-Hill, 1967.

Odiorne, G. S. Management by objective: A system of managerial leadership. New York: Pitman, 1965.

Odiorne, G. S. Management decisions by objectives. Englewood Cliffs, N.J.: Prentice-Hall, 1969.

Popper, R., & Miller, W. H. METRI personnel readiness measurement. New York: Clark, Cooper, Field, & Wohl, Inc., 1965.

Rivlin, A. M. Systematic thinking for social action. Washington, D. C.: The Brookings Institution, 1971.

Smith, P. C., & Kendall, L. M. Retranslation of expectations: An approach to the constitution of unambiguous anchors for rating scales. Journal of Applied Psychology, 1963, 47, 149-155.